

Plant Breeding Coordinating Committee

SCC 080, CSREES

Statement of Our Goals and Rationale

The Plant Breeding Coordinating Committee represents the common interests of the plant breeding community working with field, forest, horticultural and specialty crops. We collect, evaluate and utilize diverse germplasm to develop new cultivars and breeding populations. Maintaining the genetic diversity of our crops is a critical goal, while continuing our efforts to develop well-adapted varieties that are nutritious, productive, resistant to biotic and abiotic stresses, and that have a place in a value-added economy. We do this in close cooperation with a broad range of basic and applied agriculture, environment, health, and social scientists.

The Plant Breeding Coordinating Committee provides a forum for leadership regarding issues, challenges and opportunities of long-term strategic importance where plant breeding contributes to national goals. We are especially concerned about the significant reduction in public-sector commitment to plant breeding infrastructure and training. This is reflected by a reduction in both scientists committed to plant breeding in state agricultural experiment stations and a reduction in the national public sector investment for plant breeding, in spite of a continuing high demand for well-trained plant breeders in industry and government.

Plant Breeding Coordinating Committee priorities that will address CSREES Goals:

- Develop new technologies and knowledge, and integrate it into the science of plant breeding
- Develop cultivars for U.S. production that compete in the global marketplace
- Develop competitive cultivars with added value and sustainability while preserving environmental quality for rural entrepreneurs
- Develop crops with Increased health-promoting properties and appeal for consumers
- Develop crops for an agriculture system that is in harmony with the environment: resistant to biotic and abiotic stresses, with reduced energy input
- Increase public awareness of plant breeding achievements and develop leading edge education and training for plant breeders

Approach: Structure and continuity in support of leadership

The committee consists of plant breeders from land grant universities, US government, small-scale and global industry, and international organizations. We actively work to raise awareness and visibility of what plant breeders do for the global community, and what we can contribute to the future vitality of the economy. We seek to strengthen US plant breeding capacity by encouraging improvements in infrastructure and education. We are a new organization, first meeting in 2007. The following goals were identified thus far to achieve the priorities outlined:

- Establishing a national competitive plant breeding initiative to fund research improving traits of crops. Potential focus areas include:
 - Creating, identifying and harnessing genetic variation in crops to enhance human health (e.g. improve oil profiles of seed crops; nutritional profiles of food crops); generate energy (e.g. produce biofuels and additional bio-based products from starchy, oil, and cellulosic crops); and minimize environmental impact (e.g. improve performance of crops in sustainable production systems)
 - Developing tools for plant breeding
- Creation of educational materials and curriculum for K-12 and undergraduate education as well as media packages for print, television and the web to attract potential plant breeders
- Establishment of new partnerships and strengthening of existing partnerships across both the public and private sectors, both within the U.S. and globally